

## Current major event

### Dengue fever in Pakistan

The Ministry of National Health Services, Regulations and Coordination in Pakistan has recently reported a high number of dengue fever cases in the province of Khyber Pakhtunkhwa (KPK). A total of 1,279 laboratory-confirmed cases were reported during the months of July and August 2017.

### Editorial note

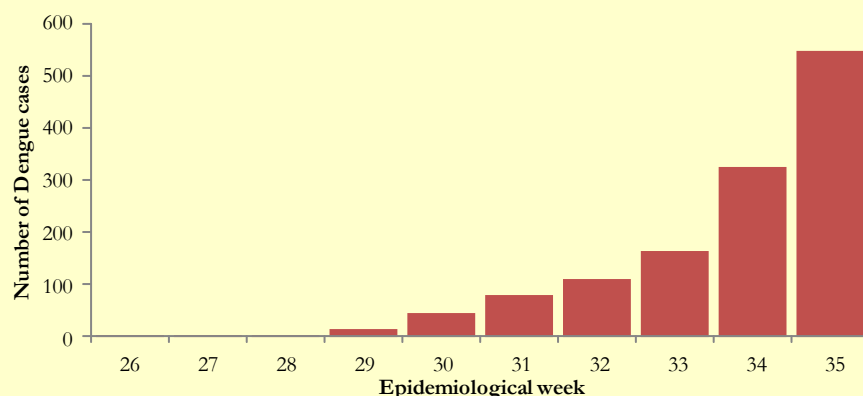
Dengue fever is endemic in Pakistan with annual seasonal outbreaks observed every year. Dengue is a viral infection caused by four distinct, but closely related, serotypes that cause the disease (DEN-1, DEN-2, DEN-3 and DEN-4) belonging to the Flaviviridae family. The virus is transmitted through the bites of infected female mosquitoes- *Aedes aegypti* and *Aedes albopictus*. These type of mosquito also transmit chikungunya, Yellow fever and Zika virus.

Since the beginning of 2017, Pakistan reported a total of 2,199 laboratory-confirmed cases of dengue fever in seven provinces (*Please see the table*). The highest number of cases- a total of 1,279 laboratory-confirmed cases was reported from Khyber Pakhtunkhwa province. The first few cases were reported in the province during the epi week 26. Lately, during the epi week of 35, high number of laboratory-confirmed cases were reported.

The highest affected age group with dengue virus in KPK province is the age group of 25-64 with 668 reported cases (52.22%), followed by the age group of 15-24 with 371 reported cases (29.04%). A total of 199 cases were reported amongst the age group of 0-14 (15.53%) and the least affected age group was 65+ with 41 reported cases (3.2%). 62.9% of the cases (804) are male while females represented 37.1% (475) of the reported cases.

Although dengue is endemic in Pakistan, the current situation needs to be responded with a sense of urgency. Dengue fever like any other arboviruses are difficult to control owing to sustenance

Laboratory-confirmed cases of dengue fever reported from Khyber Pakhtunkhwa (KPK) province in Pakistan, Epi week 26-35, 2017



Laboratory-confirmed dengue fever cases reported from Pakistan Jan-Sep\* 2017

Provinces	Lab-confirmed cases
KPK	1,279
Sindh	793
Punjab	69
FATA	25
Baluchistan	22
ICT	7
AJK	4
<b>Total</b>	<b>2,199</b>

\* Up to 03 September 2017

of competent vector. Vector control using appropriate methods and insecticide remains the mainstay of the response measures. Appropriate social mobilization campaigns and risk communication should be combined with appropriate vector control strategy for long-term control and also preventing geographic spread of the disease.

The presence of sporadic cases of Crimean-Congo haemorrhagic fever (CCHF) and chikungunya in the country may represent a major challenge to the local health authorities for mounting an appropriate response. As the clinical symptoms between these diseases are likely to overlap, case management of dengue fever specially those with haemorrhagic manifestations may lead to confusion amongst the healthcare workers (HCWs) for the diagnosis. Proper infection control measures, specially standard precautions, must be followed by the HCWs in all health facilities irrespective of presentation of cases. Surveillance should also strengthened in order to monitor circulation of the virus in the country.

## Update on outbreaks in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; Cholera in Somalia; Cholera in Yemen; Chikungunya in Pakistan.

### Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

#### Avian Influenza: 2006-2017

Egypt (A/H5N1) [359 (122), 34%]  
 Egypt (A/H9N2) [3 (0)]

#### Chikungunya: 2016-2017

Pakistan [7,303 (0)]

#### MERS-CoV: 2012-2017

Saudi Arabia [1,712 (665), 38.8%]

#### Cholera: 2016-2017

Somalia [77,133 (1,159), 1.5%]  
 Yemen [607,065 (2,047), 0.3%]

#### Lassa Fever: 2017

Nigeria [788 (117), 14.8%]

#### Avian Influenza A (H7N9): 2013-2017

China [1,557 (605), 38.9%]

#### Dengue fever: 2017

Côte d'Ivoire [858 (2), 0.2%]

#### Wild poliovirus: 2017

Pakistan [3 (0)]  
 Afghanistan [6 (0)]

#### Zika Virus Infection: 2015-2017

84 countries and territories have reported transmission so far.